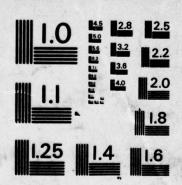


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## **LESSON MONIFORM**

# An Authoring Aid for the PLATO IV CAI System

by

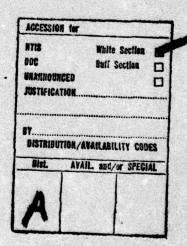
Russel E. Schulz

April 1975

Work Unit: CATALIST

Prepared for

U.S. Army Research Institute for the Behavioral and Social Sciences
1300 Wilson Boulevard
Arlington, Virginia 22209





### **HumRRO**

HUMAN RESOURCES RESEARCH ORGANIZATION
300 North Washington Street • Alexandria, Virginia 22314

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#### FOREWORD

This text is a programmed guide for the use of HumRRO-developed authoring aids for the PLATO IV Computer-Administered Instruction (CAI) system. These authoring aids, which we call Monitoring Formats (MONIFORMS), may be used by any individual who is preparing instructional material for the PLATO IV system.

MONIFORMS represent partially completed code in the TUTOR programming language and are used to create certain frequently used question types, such as multiple choice, constructed response, and matching questions. MONIFORMS require the author to provide only information relevant to his specific question, such as the text for the question, feedback messages for correct and incorrect responses, and instructions for analyzing the student's response.

A user of MONIFORMS need not be skilled in the TUTOR programming language. He need know only basic editing procedures for the PLATO system. In addition, question preparation time is greatly reduced; any question prepared with MONIFORMS can be completed within 10-15 minutes.

This text contains only guidance for question preparation using MONIFORMS. Individuals interested in the rationale and development process of MONIFORMS are referred to a companion document (HumRRO report in preparation); "MONIFORMS as Authoring Aids for the PLATO IV CAI System." The material in this guide is also available in CAI form on the PLATO IV system in Lesson "moniform."

Appreciation is expressed for the assistance provided by HumRRO researchers Dr. Harold Wagner, Nancy Hibbits, Patricia Hasty, and SP/4 John Volk (discharged). Appreciation is also extended to individuals at the University of Illinois Computer-Based Educational Research Laboratory, and especially to H.A. Himwich of that organization who has provided invaluable assistance in the development of individual MONIFORMS.

The work was performed at HumRRO Eastern Division, Alexandria, Virginia, under Work Unit CATALIST. Dr. J. Daniel Lyons is Director of the Division and Dr. Robert J. Seidel is Program Director, Instructional Technology Group.

HumRRO research for the Department of the Army under Work Unit CATALIST is performed under Army Contract DAHC 19-73-C-0004. The CATALIST work is conducted under the sponsorship of the U.S. Army Research Institute for the Behavioral and Social Sciences, with Dr. Joseph S. Ward serving as the technical monitor. Computer-administered instruction research is performed under Army Project 2Q163101A734.

#### **LESSON MONIFORM**

The material in this lesson is part of research conducted by the Instructional Technology Group of the Human Resources Research Organization (HumRRO) under contract with the U.S. Army Research Institute for the Behavioral and Social Sciences.

The purpose of this research is to develop authoring aids that will be useful to all PLATO IV users. Such authoring aids are referred to as MONIFORMS.

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Lesson MONIFORM has been designed to give you considerable freedom in branching through the several segments of the lesson. That is, you need access only those parts of the lesson that you wish.

THE MAIN INDEX IS THE LAST PAGE OF THIS DOCUMENT.

For your convenience the Main Index can be folded out from the report in a manner that permits you to see it at all times and refer to it as you work with the lessons.

#### INTRODUCTION TO MONIFORMS

This introduction to MONIFORMS is prerequisite to an understanding of the use of MONIFORMS and the remainder of the lesson. It should take you 10-15 minutes to complete.

You will be told what MONIFORMS are (and what they are not) and will be shown <u>one</u> sample question and the MONIFORM used for preparing that question.

Lesson "moniform" is a series of lessons designed to permit you to rapidly find specific information concerning HumRRO MONIFORMS. Use it somewhat like you would use Lesson AIDS.

You are not expected to take the time now to go through the entire series of lessons. However, you should complete the Introduction and then spend a few minutes browsing through the Main Index to become familiar with the general structure of the lessons and the types of information available to you.

The term MONIFORM is an acronym for MONItoring FORMats.

0

In general, MONIFORMS are partially completed coding formats. You, the author, add information related to your question and specifications for response analysis.

MONIFORMS will permit you to rapidly and easily create certain types of practice problems.

After you become familiar with using MONIFORMS, you will be able to code your questions in 10 minutes or less.

Practice questions are defined as those types of questions which are intended to TEACH as opposed to testing types of questions which primarily try to EVALUATE a student's present knowledge.

Practice questions prepared with MONIFORMS permit the author to provide the student immediate feedback depending upon the student's response. That is, the author may provide a congratulatory message for a correct response, or provide messages to lead the student toward the correct answer.

MONIFORMS are used to create <u>single</u> questions. This therefore means that the author may intermingle questions prepared with MONIFORMS with those prepared by other means, such as coding from scratch. As a consequence, use of MONIFORMS in no way dictates the overall structure of the author's lesson.

MONIFORMS require the user to understand only basic editing commands. They are especially useful for individuals who have limited TUTOR programming skills.

They are also useful to the more experienced TUTOR programmer because they greatly reduce the amount of time required for preparing certain frequently used types of questions and associated response analyses. Since MONIFORMS make use of HumRRO programs which need not be copied into your lesson, they are economical in terms of lesson space.

Let's now look at a matching type question that was prepared using a MONIFORM.

By using the MONIFORM, this question was prepared in less than 7 minutes. You can judge for yourself how long it would take to code it from scratch.

To fully appreciate how this question is executed, you will need to sign into Lesson MONIFORM. If you were signed into the lesson, the question would appear as it is reproduced on the following page.

Also on-line, you would be able to move the arrow up and down with the NEXT and BACK keys. This feature allows you to temporarily skip specific parts of the question, and then to return to them later.

-

- I. basketball
- a. eleven
- 2. football
- b. nine

- 3. hockey
- c. five
- 4. baseball
- d. six

You may move the arrow backwards to correct an error by pressing the BACK key.

Turn to page A-14

c 1. basketball a. eleven a 2. football b. nine b 3. hockey c. five d 4. baseball d. six

You may move the arrow backwards to correct an error by pressing the BACK key.

Turn to page A-14 for display that would be seen if the above answers were given and the student then pressed the NEXT key.

C	1.	basketball	a.	elever
a	2.	football	b.	nine
b	3.	hockey	c.	five
d	4.	baseball	d.	six

Check your answers carefully. If you wish to change any of them, press DATA. Otherwise press NEXT.

Turn to page A-16 if student pressed the NEXT - key at this point.

c 1. basketball

a. eleven

a 2. football

b. nine

no b 3. hockey

c. five

no d 4. baseball

d. six

You got 2 correct this time. Try to correct your errors. Press the NEXT key to move the arrow.

Student would now attempt to correct errors.

Turn to page A-17 for display he would see if all questions were answered correctly.

Turn to page A-19 for display he would see if attempt limit is reached and he still has 1 or more incorrect answers.

C	1.	basketball	a.	eleven
а	2.	football	b.	nine
d	3.	hockey	C.	five
b	4.	baseball	d.	six

You're batting a 1000

Turn to page A-18.

This represents the unit the student would be branched to if he answered the entire question correctly.

Turn to page A-21.

		а	1.	basketball	a.	eleven
		b	2.	football	b.	nine
d	no	С	3.	hockey	c.	five
b	no	d	4.	baseball	d.	six

The correct answers for the matches you missed are shown on the left. Study them carefully.

Turn to page A-20.

This represents the remediation unit that the student would be branched to if the correct answers were given to him.

Turn to page A-21.

Keep in mind that if you were preparing a question with this MONIFORM you would have several options available to you to "tailor" the question to your particular requirements. For example:

- 1. You could have a maximum of 10 matching items.
- 2. You could have single, double, or triple spacing between matching items.
- You specify the number of attempts student is permitted.
- 4. You write the "correct answer feedback."
- You specify the type of assistance the student receives when attempt limit is reached and he is still incorrect. You could have:

   (1) answer given (as in the sample), (2) the instructor called and the keyboard locked, or
   (3) no assistance given.

As you can see from the above options, you have considerable freedom in designing your question.

Now, let's look at the completed MONIFORM that produced this question. I think you will be pleasantly surprised with the small amount of code required.

Pagitari

#### COMPLETED MONIFORM

unit sample
zero n(offset),13
at 708
write Match the number of players for each of the sports
listed below:

- basketball
   football
   hockey
   baseball
   six
- pack temp2,n(offset+1),cadb
  pack temp2,caf1,You're batting 1000!
  calc arrow1 ← 1008
  noalt ← 4
- assist ← answer join drive3Ø
- next totcor=noalt,intro12,intro12a,

This is all of the code that would be in your lesson (except for Unit "setup" which is copied one time only). All code necessary for question execution resides in HumRRO lesson space. (Later, see Unit "setup".)

Finally, let's look at the uncompleted MONIFORM used for creating the sample. This is the format that you would copy into your lesson and modify to prepare your specific question.

#### **UNCOMPLETED MONIFORM**

unit form9 \$\$ r form9 with your unit name zero n(offset),13 \$\$ copy as is

\*Go to "ID" mode to insert your question. Note the following:

- \*1. You are limited to 10 matching items.
- \*2. Answers must be letters (i.e., a, b, c, d, etc.).
- \*3. Note the screen position of where you want the first
- \* arrow to appear.
- \*4. The -pack- command below requires the "correct answer
- \* string" to be added (e.g., temp2,n(offset+1),dafebc).

temp2,n(offset+1),	\$\$ add correct answ string		
temp2,caf1,	\$\$ add correct answer feedback		
arrow1¢	\$\$ add position for first arrow		
noalt &	\$\$ add # of matching items used		
notries <b></b>	\$\$ add # attempts student permitted		
space &	\$\$ add # lines between match items		
assist &	\$\$ add:instr-instr assistance		
	\$\$ add:answer-correct answ given		
	\$\$ add:none-no assistance given		
drive3Ø	\$\$ copy as is		
totcor=noalt,nextu,o	theru, \$\$r nextu with next unit		
	\$\$ otheru with remediation		
	\$\$ unit		
	temp2,caf1, arrow1& noalt & notries & space & assist &  drive30		

<sup>\*</sup>Your question is ready. Switch to student mode to try it.

Instructions for completing the MONIFORM follow the \$\$.

"r" means replace.

This completes the "Introduction to MONIFORMS".

When you return to the Main Index, it is suggested that you take a few minutes to browse through the remainder of the options listed.

The suggested order of browsing follows:

- (1) Sample Questions
- (2) MONIFORM Characteristics
- (3) Unit "setup"
- (4) How to Use MONIFORMS
- (5) For remaining sections—any order

#### SAMPLE MONIFORM QUESTIONS

In preparing sample questions it is not possible to give illustrations of all the options available to the author. Therefore, as you examine these sample questions keep in mind that if you were using the MONIFORM you would be able to tailor the question to your liking.

Specific characteristics of each sample question appear at the top of the page. The box on the bottom half of the page shows feedback messages that the student would receive depending on his response, or the particular attempt at the question.

Use the following definitions in examining the Index below:

random = answer alternatives presented in random order
non-random = answer alternatives presented in order specified
by author
general = general wrong answer feedbacks (not response
specific)
specific = response specific wrong answer feedbacks

#### INDEX OF MONIFORM SAMPLE QUESTIONS

# **Multiple Choice**

# Page B-3 MONIFORM1—random/general B-4 MONIFORM2—non-random/general B-5 MONIFORM3—random/specific B-6 MONIFORM4—non-random/specific

#### Constructed Response

B-7	MONIFORM5—general
B-8	MONIFORM6—specific
B-9	MONIFORM7—general/specific

#### Matching

B-10	Student	moves	pointer
B-11	Student	types	answer

#### MONIFORM1 SAMPLE QUESTION-MULTIPLE CHOICE

#### **Specifications**

- -Answer alternatives presented in random order
- -4 general (not response specific) try again feedbacks
- -No long 1 feature (Student must press NEXT to judge)
- -Student permitted 5 incorrect attempts
- -Instructor called after 5th incorrect attempt
- -If keyboard LOCKS, type: unlock
- -Unanticipated response feedback
- -Correct answer: donkey

In the Winnie the Pooh series what kind of animal is Eeyore? Select an animal from the choices below.

- 1. rabbit
- 2. bear
- 3. owl
- 4. donkey
- 5. kangaroo

#### **Feedbacks**

Feedback given student for correct answer

You're no ass!

Feedbacks given student for each incorrect try.

Try 1-No. Hint1: Eeyore has four legs.

Try 2-No. Hint2: Eeyore kicks up a hit.

Try 3-No. Hint3: Eeyore has a funny voice.

Try 4-No Hint4: Eeyore is gray.

Try 5-No Hint4: Eeyore is gray.

Try 6-Please call your instructor.

#### MONIFORM2 SAMPLE QUESTION-MULTIPLE CHOICE

#### **Specifications**

- -Author has written only 4 answer alternatives (maximum is 6)
- -Answer alternatives presented in order specified by author
- -Student permitted 3 attempts at question (author's option)
- —After 3rd incorrect attempt the student is given the correct answer and branched to a remediation unit (This is 1 of 3 possible options available)
- -long 1 feature
- -correct answer: John L. Lewis

Of the people listed below, which <u>one</u> was a famous labor union leader?

- 1. Jim Brown
- 2. Bobby Riggs
- 3. Jules Verne
- 4. John L. Lewis

#### **Feedbacks**

Feedback given student for correct answer

True! A real giant of a man.

Feedbacks given student for each incorrect try.

Try 1-No. Who has bushy eyebrows?

Try 2-No. Which one was once a miner?

Try 3-The correct answer is: John L. Lewis.

#### MONIFORM3 SAMPLE QUESTION—MULTIPLE CHOICE

#### **Specifications**

- -Answer alternatives presented in random order
- -Response specific feedbacks
- -No long 1 feature
- -6 incorrect attempts permitted
- -Instructor called after 6th incorrect attempt
  - If keyboard LOCKS, type: unlock
- -Unanticipated response feedback
- -Correct answer: Linus

In the Charie Brown cartoon series which character carries a blanket much of the time?

- 1. The big pumpkin
- 2. Schroeder
- 3. Pig Pen
- 4. Linus
- 5. Charlie Brown
- 6. Lucy

#### **Feedbacks**

Feedback given student for specific answer alternative selected.

Alternative 1-You've got to be putting me on.

Alternative 2-He's the piano player.

Alternative 3-The blanket would rot away.

Alternative 4\*-We all need our crutches.

Alternative 5-He needs gumption, not a blanket!

Alternative 6-Believe me. She needs no blanket.

\* Correct answer feedback

#### MONIFORM4 SAMPLE QUESTION-MULTIPLE CHOICE

#### **Specifications**

- -Answer alternatives presented in order specified by author (not random)
- -Response specific try again feedbacks
- -Long 1 feature
- -6 incorrect attempts permitted
- -Correct answer given after 6th incorrect attempt
- -Unanticipated response feedback
- -Correct answer: Burt Reynolds

Who was the first male to appear nude in the centerfold of a women's magazine?

- 1. Tiny Tim
- 2. John Cameron Sweazey
- 3. Moshe Dayan
- 4. Burt Reynolds
- 5. Nixon
- 6. Wilbur Mills

Feedbacks

Feedback given student for specific answer alternative selected

Alternative 1-Who would pay to see him naked?

Alternative 2-He gets his kicks by being well dressed.

Alternative 3-No. He even keeps one eye covered.

Alternative 4\*-RIGHT! Shameless!

Alternative 5-What was uncovered was not his body.

Alternative 6—His secret love life was uncovered.

\*Correct answer feedback

#### MONIFORM5 SAMPLE QUESTION—CONSTRUCTED RESPONSE

#### **Specifications**

- -4 general try again feedbacks (not response specific)
- -5 incorrect attempts permitted
- -correct answer given after 5th incorrect attempt
- -feedback provided if student presses NEXT without entering an answer
- -specs: nomark,bumpshift,nookno
- -optional words: the, drink, is, it, is
- -answer: water OR H2O

What popular drink, used by people of all ages and in all cultures, has the fewest number of calories?

**Feedbacks** 

Feedback given student for correct answer

True, but it's not as good as Scotch!

Feedbacks given student for each incorrect try

Try 1-It is a clear fluid.

Try 2-It consists of hydrogen and oxygen.

Try 3-It is found in most homes in the U.S.

Try 4-We use it to make ice cubes.

Try 5-The correct answer is: water.

#### MONIFORM6 SAMPLE QUESTION—CONSTRUCTED RESPONSE

#### **Specifications**

0

- -5 specific wrong answer feedbacks
- -1 general wrong answer feedback
- -feedback provided if student presses NEXT without entering an answer
- -specs: nomark,bumpshift
- -6 incorrect attempts permitted
- -answer given after 6th incorrect attempt
- -optional words: day,is,the,we,celebrate,with,fireworks
- -wrong answers: xmas OR Christmas

Easter

Valentines day OR St Valentine's day

New Years day OR New Years OR 1 January

OR New Years Eve

Labor Day

-correct answers: 4th of July OR fourth of July OR

forth of July OR July 4th

What day do Americans celebrate with fireworks?

#### **Feedbacks**

Feedback given student for correct answer

They certainly are noisy.

Feedback given student for specific wrong answers

Xmas or Christmas

That's a Christmas tree.

Valentines Day or St. Valentine's Day

That's a day for lovers.

New Year's Day or New Year's or 1 January

or New Years Eve

True, but most celebrate with booze.

Labor Day

It is too hot for firecrackers.

Feedback given student for unanticipated wrong answers

Come off it. Try again.

#### MONIFORM7 SAMPLE QUESTION—CONSTRUCTED RESPONSE

#### **Specifications**

- -5 response specific try again feedbacks
- -4 general try again feedbacks
- -feedback provided if student presses NEXT without entering a response
- -6 incorrect attempts permitted
- -instructor called after 6th incorrect attempt

If keyboard LOCKS, type: unlock

- -specs: bumpshift, nomark
- -optional words: it,is,it's,the,state,of
- -wrong answers:
- Pa OR Pennsylvania
- NJ OR New Jersey NY OR New York
- Va OR Virginia
- Md OR Maryland
- -correct answer:
- Delaware OR Del. OR DE

What was the first state to join the U.S.?

#### **Feedbacks**

Feedbacks given student for correct answer

Delaware-A small but powerful state.

Feedbacks given student for specific wrong answers

Pa or Pennsylvania-They were second in the Union.

NJ or New Jersey-That's known as the Garden State.

NY or New York-The Empire State could not be first.

Va or Virginia-Virginia is for lovers.

Md or Maryland-Spiro's home doesn't make it.

#### Feedbacks given student for unanticipated wrong answers

- It's located in the East on the ocean.
- It's the second smallest state.
- It has a river named after it.
- It's between Pa. NJ. and Md.

#### MONIFORM8 SAMPLE QUESTION-MATCHING

#### **Specifications**

- -matching items presented in random order
- -student uses "w" and "x" keys to position pointer and select match
- -2 attempts at entire matching problem permitted
- -after 2nd incorrect attempt correct answer given
- -author writes NO feedbacks except correct answer feedback
- -correct answers: 1-delicioso; 2-pacifista; 3-casa;

4-voluptuoso; 5-grande; 6-hombre; 7-martes

#### Match the Spanish word with the English word.

1. delicious delicioso

2. pacifist hombre 3. house pacifista

voluptuous casa

5. large Martes

6. man voluptuoso 7.

Tuesday grande

Use the "w" & "x" keys to position pointer. Then press NEXT

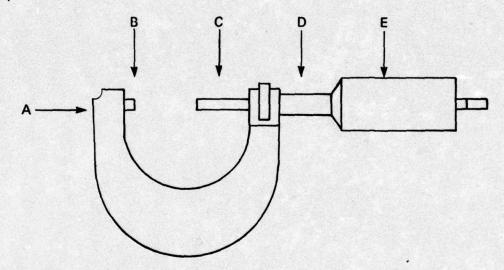
#### **Feedbacks**

Feedback given student for correct answer Muy Bien

#### MONIFORM9 SAMPLE QUESTION-MATCHING

#### **Specifications**

- -student may move arrow up and down to leave item blank or correct answer
- -student informed of specific incorrect matches
- -2 attempts at entire matching problem permitted
- -after 3rd incorrect attempt correct answer given
- -correct answers: 1-d,2-a,3-e,4-c,5-b



Match the parts of the micrometer shown above. Type the appropriate letters below.

- > 1. barrel
  - 2. frame
  - 3. thimble
  - 4. spindle
  - 5. anvil

You may move the arrow backwards to correct an error by pressing the BACK key

Do NOT press NEXT after entering an answer. Press NEXT to leave a question blank or skip an already answered question

#### **Feedbacks**

Feedback given student for correct answer
You really know the micrometer.

#### COMPLETED MONIFORMS

The reasons for including <u>completed</u> MONIFORMS in this lesson are:

- They illustrate that very little of your lesson space is used for question preparation.
   (What you see is all that goes into your lesson.)
- They show the correct completion of the various MONIFORMS and therefore may be of some assistance in debugging your MONIFORM question.

Use the following definitions in examining the Index below:

random	= answer alternatives presented in random order
non-random	= answer alternatives presented in order specified
	by author
general	= general wrong answer feedbacks (not response
	specific)
specific	= response specific wrong answer feedbacks

#### INDEX OF COMPLETED MONIFORMS

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C-10	Student moves pointer	
C-11	Student types answer	

Multiple Choice

#### **MONIFORM1** (Completed) Multiple Choice

unit cm1 zero v(offset),68 calc pos \$ 1010 write ⟨ at,pos⟩ In the Winnie the Pooh series what kind of animal is Eeyore? Select an animal from the choices below. \$\$ calc pack temp,catext,donkey pack temp, dist1, bear pack temp, dist2, kangaroo pack temp,dist3,owl pack temp,dist4,rabbit pack temp, dist5, calc pack temp,caf,You're no ass! pack temp,taf,No. Hint1: Eeyore has 4 legs. pack temp,taf2,No. Hint2: Eeyore kicks up a bit. pack temp,taf3,No. Hint3: Eeyore has a funny voice. pack temp,taf4,No. Hint4: Eeyore is gray. assist instr calc ntaf & 4 join drive1

join

drive12 nextnow tries>notries, test6a, x,

# MONIFORM2 (Completed) Multiple Choice

unit	cm2
define	form1
zero	v(offset),68
calc	pos \$1510
write	∢ at,pos> Of the people listed below, which one was
	a famous labor union leader?
calc	lines
pack	temp,alt1,Jim Brown
pack	temp,alt2,Bobby Riggs
pack	temp,alt3,Jules Verne
pack	temp,alt4,John L. Lewis
pack	temp,alt5,
pack	temp,alt6,
calc	nodist ∉ 4
	answ
	notries ♦ 3
pack	temp,caf,True! A real giant of a man.
pack	temp,taf,No. Who had bushy eyebrows?
pack	temp,taf2No. Which one was once a miner?
pack	temp,taf3,
pack	temp,taf4,
calc	ntaf ← 2
	assist & answer
	long1
join	drive1a
join	drive12
nextnow	remed > 0,q2r,x,

## **MONIFORM3 (Completed) Multiple Choice**

unit myname next nextu define form1 zero v(offset),72 pos \$ 1510 calc write ∢ at,pos
> In the Charlie Brown cartoon series which character carries a blanket much of the time? \$\$ \$\$ calc lines & 2 temp,catext,Linus pack pack temp,caf,We all need our crutch! pack temp, dist1, Charlie Brown pack temp,taf,He needs gumption, not a blanket! pack temp, dist2, Schroeder pack temp,taf2,He's the piano player. pack temp,dist3,Pig Pen pack temp,taf3,The blanket would rot away! pack temp, dist4, Lucy pack temp,taf4,Believe me. She needs no blanket! pack temp,dist5,The big pumpkin pack temp,taf5,You've gotta be putting me on! nodist ¢ 5 calc notries ¢ 6 assist ¢ instr long1 ← Ø join drive1 join drive9

nextnow remed=0,x,itsname

#### MONIFORM4 (Completed) Multiple Choice

unit Thisu next nexunit define form1 zero v(offset),76 calc pos \$1210 write ∢ at,pos
⟩ Who was the first male to appear nude in the centerfold of a women's magazine? \$\$ \$\$ calc lines 42 pack temp,alt1,Tiny Tim pack temp,taf,Who would pay to see him naked? pack temp,alt2,John Cameron Sweazey pack temp,taf2,He gets his kicks by being well dressed. pack temp,alt3,Moshe Dayan pack temp,taf3,No! He even keeps one eye covered. pack temp,alt4,Burt Reynolds pack temp,taf4,RIGHT! Shameless! pack temp,alt5, Nixon pack temp,taf5,What was uncovered was not his body. pack temp,alt6,Wilbur Mills pack temp,taf6,His secret love life was uncovered. calc nodist ¢ 6 answ ¢ 4 assist ¢ answer long1 ¢ 1 join drive1a join drive9 nextnow remed=0,x,q40

#### MONIFORM5 (Completed) Constructed Response

unit mnform5 form 1 define v(offset).68 zero pos \$ 1305 calc write ∢ at,pos
> What popular drink used by people of all ages, and in all cultures, has the fewest number of calories? \$\$ lines \$3 calc mnform5 vocabs <the,drink,is,it> catext, water, h20) pack temp,catext,Water pack temp,caf,True, but it's not as good as Scotch! pack temp,taf,It is a clear fluid. pack temp,taf2,It consists of hydrogen and oxygen. pack temp,taf3,It is found in most homes in the U.S. pack temp,taf4,We use it to make ice cubes. calc ntaf ¢ 4 notries ¢ 5 pos & pos+ (linesx 100) pos+200 arrow nomark,bumpshift,nookno specs drive16 ioin nextnow remed=0,x,q5a ansok, drive14, drive15, goto concept catext

## MONIFORM6 (Completed) Constructed Response

unit mnform6 define form 1 zero v(offset),72 calc pos \$ 2210 vocabs mnform6 <day,is,the,we,celebrate,with,fireworks> (catext,4\*th\*of\*july,fourth\*of\*july,forth\*of\*july, july\*4\*th) (alt1,xmas,christmas) (alt2,easter) (alt3, valentines\*day, st\*valentine7s\*day) (alt4,new\*years\*day,new\*years,1\*january,new\*years\*eve) (alt5,labor\*day) write <a href="mailto:</a>, at,pos> What day do we in the United States celebrate with fireworks? calc pack temp,catext,Fourth of July pack temp,caf,They certainly are noisy. pack temp,taf,That's a Christmas tree. pack temp,taf2,A rabbit doesn't shoot firecrackers. pack temp,taf3,That's a day for lovers. temp,taf4,True, but most celebrate with booze. pack pack temp,taf5,It is too hot for firecrackers. pack temp,waf,Come off it. Try again. calc notries ¢ 6 pos \( pos+(linesx 100) pos+200 arrow specs nomark, bumpshift drive16 join nextnow remed=0,x,q6a goto ansok, drive 14, drive 17, concept catext concept alt1 concept alt2 concept alt3 concept alt4

concept alt5

## MONIFORM7 (Completed) Constructed Response

```
unit
          yrname
define
          form1
zero
          v(offset),79
calc
          pos $ 2210
vocabs
          yrname
          <it,is,it7s,the,state,of>
          (catext, delaware, del, de)
          (alt1,pa,pennsylvania)
          (alt2,nj,new*jersey)
          (alt3,ny,new*york)
          (alt4,va.virginia)
          (alt5,md,maryland)
write
           <at,pos> What was the first state to join the U.S.?
calc
          lines ¢1
pack
          temp,catext,Delaware
pack
          temp,caf,A small but powerful state.
pack
          temp,taf,They were second in the Union.
pack
          temp,taf2,That's known as the Garden State.
pack
          temp,taf3,The Empire State could not be first.
pack
          temp,taf4,Virginia is for lovers.
pack
          temp,taf5,Spiro's home doesn't make it.
pack
          temp, waf, It's located in the East on the ocean.
pack
          temp, waf2, It's the second smallest state.
          temp, waf3, It has a river named after it.
pack
pack
          temp, waf4, It's between Pa, NJ, and Md.
calc
          notries ¢6
          ntaf $4
          assist  instr
          pos & pos+(linesx100)
arrow
          pos+200
specs
          nomark, bumpshift
join
          drive16
nextnow remed=0,x,review,
goto
          ansok, drive 14, drive 18,
concept catext
concept
concept alt2
concept
         alt3
concept alt4
```

concept alt5

# **MONIFORM8 (Completed) Matching**

unit	myunit		
define	form1		
zero	v(offset),85		
at	1410		
write	Match the Spanish word with the English word.		
	1. delicious		
	2. pacifist		
	3. house		
	4. voluptuous		
	5. large		
	6. man		
	7. Tuesday		
pack	temp,match1,delicioso		
pack	temp,match2,pacifista		
pack	temp,match3,casa		
pack	temp,match4,voluptuoso		
pack	temp,match5,grande		
pack	temp,match6,hombre		
pack	temp,match7,Martes		
pack	temp,match8,		
pack	temp,match9,		
pack	temp,caf,Muy bien!		
calc	posA		
	posB		
	pos <b>← 24</b>		
	noalt ¢7		
	assist		
join	drive19		
jump	rightT=noalt qdex,q8a		

# MONIFORM9 (Completed) Matching

		unit zero	itsname n(offset),13		
U		at write	912 Match the chemical compound their formulae.	ds below	with
			1. Sulfuric Acid	a.	C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>
			2. Water	b.	KC1
Same and a			3. Sugar	c.	H <sub>2</sub> O <sub>2</sub>
<b>5</b> 7			4. Table Salt	d.	H <sub>2</sub> SO <sub>4</sub>
U			5. Hydrochloric Acid	e.	NaCl
11	#I)		6. Potassium Chloride	f.	H <sub>2</sub> O
Constant of the Constant of th			7. Lead Oxide	g.	HCI
			8. Peroxide	h.	PbO <sub>2</sub>
L		pack	temp2,n(offset+1),dfaegbhc		
I		pack calc	temp2,caf1,You did extremely arrow1 ← 1208 noalt ← 8	/ well.	
			notries <b>← 4</b> space <b>← 2</b>		
			assist ⇔ instr		
		join	drive3Ø		
Vine P		next	totcor=noalt,qdex,qdex,		
П					

U

#### **UNCOMPLETED MONIFORMS**

The uncompleted MONIFORMS shown in this section of the lesson represent code that must be copied into your lesson space and then modified by following instructions that follow the \$\$ in the MONIFORMS.

The uncompleted MONIFORMS that you copy into your lesson are located in lesson "hum8". Additional assistance in completing the MONIFORMS can be obtained from the Main Index (page J-1, "Assistance with Code Completion".

Use the following definitions in examining the Index below:

random = answer alternatives presented in random order
non-random = answer alternatives presented in order specified
by author
general = general wrong answer feedbacks (not response
specific)
specific = response specific wrong answer feedbacks

#### INDEX OF UNCOMPLETED MONIFORMS

#### **Multiple Choice** Page D-3 MONIFORM1-random/general D-4 MONIFORM2—non-random/general D-5 MONIFORM3-random/specific D-6 MONIFORM4-non-random/specific Constructed Response D-7 MONIFORM5—general **D-8** MONIFORM6-specific D-9 MONIFORM7-general/specific Matching D-10 Student moves pointer D-11 Student types answer

# MONIFORM1 (Uncompleted)—Multiple Choice

unit	form1	\$\$ r form1 with your unit name
next	nextu	\$\$ r nextu with unit name S goes to if
		\$\$ he gives correct answer
define	form1	\$\$ copy as is
zero	v(offset),68	\$\$ copy as is
calc	pos¢	\$\$ add screen position to begin quest
write	∢ at,pos >	\$\$ add after > line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines &	\$\$ add # of lines of questions used
pack	temp,catext,	\$\$ add correct answer alternative
pack	temp,dist1,	\$\$ add text for distractor 1
pack	temp,dist2,	\$\$ add text for distractor 2
pack	temp,dist3,	\$\$ add text for distractor 3
pack	temp,dist4,	\$\$ add text for distractor 4
pack	temp,dist5,	\$\$ add text for distractor 5
calc	nodist <b></b>	\$\$ add # distractors used
	notries <b></b>	\$\$ add # attempts permitted
	long1¢	\$\$ add 1 for immed. judging (long1); add
		\$\$ Ø if S must first press next to judge
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add text for try again feedback 1
pack	temp,taf2,	\$\$ add text for try again feedback 2
pack	temp,taf3,	\$\$ add text for try again feedback 3
pack	temp,taf4,	\$\$ add text for try again feedback 4
calc	ntaf <b>←</b>	\$\$ add # of try again feedbacks used
	assist <b>⟨</b> =	\$\$ add: instr-for instructor assistance OR
		\$\$ add: answer—correct answer given
		\$\$ add: none—no assistance given
join	drive1	\$\$ copy as is
join	drive12	\$\$ copy as is
nextnow	remed>0, otheru,x,	\$\$ r "otheru" with unit S
		\$\$ goes if answ given him

# MONIFORM2 (Uncompleted) Multiple Choice

unit	form2	\$\$ r form2 with your unit name	
next	nextu	\$\$ r nextu with unit name S goes to	
		\$\$ if he gives correct answer	
define	form1	\$\$ copy as is	
zero	v(offset),68	\$\$ copy as is	
calc	pos¢	\$\$ add screen position to begin question	
write	∢ at,pos>	\$\$ add after ➤ line 1 of question	
	\$\$	\$\$ r first \$\$ with line 2 of question	
	\$\$	\$\$ r first \$\$ with line 3 of question	4
	\$\$	\$\$ r first \$\$ with line 4 of question	
calc	lines &	\$\$ add # of lines of questions used	
*you ar	re allowed 6 answe	er alternatives 1 of which	
*must l	be the correct answ	ver.	
pack	temp,alt1,	\$\$ add answer alternative 1	
pack	temp,alt2,	\$\$ add answer alternative 2	
pack	temp,alt3,	\$\$ add answer alternative 3	
pack	temp,alt4,	\$\$ add answer alternative 4	
pack	temp,alt5,	\$\$ add answer alternative 5	
pack	temp,alt6,	\$\$ add answer alternative 6	
calc	nodist &	\$\$ add # alternatives used	
	answ⊄	\$\$ add the # of the alternative	
		\$\$ which is the correct answer	
	notries&	\$\$ add # attempts permitted	
pack	temp,caf,	\$\$ add correct answer feedback	
pack	temp,taf,	\$\$ add text for try again feedback 1	
pack	temp,taf2,	\$\$ add text for try again feedback 2	
pack	temp,taf3,	\$\$ add text for try again feedback 3	
pack	temp,taf4,	\$\$ add text for try again feedback 4	
calc	ntaf⊄	\$\$ add # of try again fdbacks used (1,2,3,4)	
	assist &	\$\$ add: instr-for instr assistance OR	
		\$\$ answer—correct answer given OR none	
	long1¢	\$\$ add 1 for immed. judging (long1);add Ø	
		\$\$ if S must first press NEXT	
join	drive1a	\$\$ copy as is	
join	drive12	\$\$ copy as is	

# MONIFORM3 (Uncompleted) Multiple Choice

unit	form3	\$\$ r form3 with your unit name
next	nextu	\$\$ r nextu with name of next unit
define	form1	\$\$ copy as is
zero	v(offset),72	\$\$ copy as is
calc	pos¢	\$\$ add screen position to begin question
write	∢ at,pos>	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	<b>\$\$</b>	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines &	\$\$ add # lines of questions used
pack	temp,catext,	\$\$ add text for correct
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,dist1,	\$\$ add text for 1st distractor (dist)
pack	temp,taf,	\$\$ add text of try again fdback dist1
pack	temp,dist2,	\$\$ add text for 2d distractor
pack	temp,taf2,	\$\$ add text of try again fdback dist2
pack	temp,dist3,	\$\$ add text for 3d distractor
pack	temp,taf3,	\$\$ add text of try again fdback dist3
pack	temp,dist4,	\$\$ add text for 4th distractor
pack	temp,taf4,	\$\$ add text of try again fdback dist4
pack	temp,dist5,	\$\$ add text for 5th distractor
pack	temp,taf5,	\$\$ add text of try again fdback dist5
calc	nodist <b></b>	\$\$ add # distractors written
	notries 4	\$\$ add # attempts student permitted
	assist ←	\$\$ add: instr-for instructor assistance OR
		\$\$ add: answer-answer given OR none
	long1¢	\$\$ add 1 for immed. judging (long1); add Ø
		\$\$ if S must first press next
join	drive1	\$\$ copy as is
join	drive9	\$\$ copy as is
nextnow	remed=0,x,otheru,	\$\$ r otheru with name of
		\$\$ remediation unit

0

# MONIFORM4 (Uncompleted) Multiple Choice

unit	form4	\$\$ r form4 with your unit name
next	nextu	\$\$ r nextu with name of next unit
define	form1	\$\$ copy as is
zero	v(offset),76	\$\$ copy as is
calc	pos¢	\$\$ add screen position to begin question
write	∢ at,pos >	\$\$ add line 1 of question
	<b>\$\$</b>	\$\$ r first \$\$ with line 2 of question
	<b>\$\$</b>	\$\$ r first \$\$ with line 3 of question
	<b>\$\$</b>	\$\$ r first \$\$ with line 4 of question
calc	lines &	\$\$ add # lines of questions used
*this qu	estion allows 6 answ	er alternatives 1 of which must
*be the	correct answer	
pack	temp,alt1,	\$\$ add answer alternative 1
pack	temp,taf,	\$\$ add alternative 1 try again fdback
pack	temp,alt2,	\$\$ add answer alternative 2
pack	temp,taf2,	\$\$ add alternative 2 try again fdback
pack	temp,alt3,	\$\$ add answer alternative 3
pack	temp,taf3,	\$\$ add alternative 3 try again fdback
pack	temp,alt4,	\$\$ add answer alternative 4
pack	temp,taf4,	\$\$ add alternative 4 try again fdback
pack	temp,alt5,	\$\$ add answer alternative 5
pack	temp,taf5,	\$\$ add alternative 5 try again fdback
pack	temp,alt6,	\$\$ add answer alternative 6
pack	temp,taf6,	\$\$ add alternative 6 try again fdback
calc	nodist <b></b>	\$\$ add # alternatives written
	answ¢	\$\$ add the # of the alternative which
		\$\$ is the correct answer
	notries &	\$\$ add # attempts student permitted
	assist &	\$\$ add: instr-for instructor assistance OR
		\$\$ add: answer-correct answer given OR none
	long1 ¢	\$\$ add 1 for immed. judging (long1); add Ø
		\$\$ if S must press next to judge answer
join	drive1a	\$\$ copy as is
join	drive9	\$\$ copy as is
nextnow	remed=0, x,otheru,	\$\$ r otheru with name of
		\$\$ remediation unit

#### MONIFORM5 (Uncompleted) Constructed Response

0

-

Contract of

-

Parent

unit	form5	\$\$ r form5 with your unit name
next	nextu	\$\$ r nextu with unit name S goes to
define	form1	\$\$ copy as is
zero	v(offset),68	\$\$ copy as is
calc	pos¢	\$\$ add starting position of question
write	∢ at,pos>	\$\$ add line 1 of question
	\$\$	\$\$ r first \$\$ with line 2 of question
	\$\$	\$\$ r first \$\$ with line 3 of question
	\$\$	\$\$ r first \$\$ with line 4 of question
calc	lines &	\$\$ add # lines if question used
vocabs	form3	\$\$ r form3 with your unit name
	< zz,zz,zz>	\$\$ r zzzz with optional words wanted
	(catext,zzzz)	\$\$ r zzzz with correct answer(s)
pack	temp,catext,	\$\$ add correct answer (only one)
pack	temp,caf,	\$\$ add correct answer feedback
pack	temp,taf,	\$\$ add text for try again fdback try 1
pack	temp,taf2,	\$\$ add text for try again fdback try 2
pack	temp,taf3,	\$\$ add text for try again fdback try 3
pack	temp,taf4,	\$\$ add text for try again fdback try 4
calc	ntaf∜	\$\$ add # of try again fdbacks used
	notries &	\$\$ add # attempts student permitted
	assist ¢	\$\$ add: instr-for instructor assistance OR
		\$\$ add: answer—correct answer given OR none
pos ¢ pos	+ (lines x 100)	\$\$ copy as is
arrow	pos+200	\$\$ copy as is
specs	\$\$	\$\$ r first \$\$ with specs you want
join	drive16	\$\$ copy as is
nextnow	remed=0,x,otheru,	\$\$ r otheru with remediation unit
goto	ansok,drive14,drive	15, \$\$ copy as is
concept	catext	\$\$ copy as is

#### MONIFORM6 (Uncompleted) Constructed Response

```
unit
          form4
                              $$ r form6 with your unit name
                              $$ r nextu with your next unit
next
          nextu
define
          form1
                              $$ copy as is
          v(offset),72
zero
                              $$ copy as is
calc
          pos &
                              $$ add screen position to start
write
                              $$ add line 1 of guestion
          ∢at,pos >
          $$
                              $$ r first $$ with line 2 of question
          $$
                              $$ r first $$ with line 3 of question
          $$
                              $$ r first $$ with line 4 of question
          lines &
calc
                              $$ add # question lines used
vocabs
          form6
                              $$ r form6 with your unit name
          <zz,zz,zz>
                              $$ r zz's with optional words
          (catext,zzzz)
                              $$ r zz's with correct answer
          (alt1, wrong1)
                              $$ r wrong 1 with incorrect answer 1
          (alt2,wrong2)
                              $$ r wrong 2 with incorrect answer 2
          (alt3,wrong3)
                              $$ r wrong 3 with incorrect answer 3
          (alt4, wrong4)
                              $$ r wrong 4 with incorrect answer 4
          (alt5,wrong5)
                              $$ r wrong 5 with incorrect answer 5
                              $$ add correct answer (one only)
pack
          temp,catext,
pack
                              $$ add correct answer feedback
          temp,caf,
pack
          temp, taf,
                              $$ add feedback for wrong answer 1
pack
          temp,taf2,
                              $$ add feedback for wrong answer 2
pack
          temp,taf3,
                              $$ add feedback for wrong answer 3
pack
          temp,taf4,
                              $$ add feedback for wrong answer 4
pack
          temp, taf5,
                              $$ add feedback for wrong answer 5
pack
          temp,waf,
                              $$ add fdback-"general" wrong answer
          notries 
←
                              $$ add # attempts student permitted
calc
          assist ⟨=
                              $$ add: instr-for instructor assistance OR
                              $$ add: answer-correct answer given OR none
          pos $\dippos + (lines x 100)
                                        $$ copy as is
                   pos + 200
          arrow
                                        $$ copy as is
                   22
          specs
                                        $$ r first $$ with desired specs
          drive16
ioin
                              $$ copy as is
nextnow remed=0x,otheru,
                              $$ r otheru with name remed unit
goto
          ansok, drive 14, drive 17,
                                        $$ copy as is
concept catext
                              $$ copy as is
concept alt1
                              $$ copy as is (delete if not used)
concept alt2
                              $$ copy as is (delete if not used)
concept alt3
                              $$ copy as is (delete if not used)
concept alt4
                              $$ copy as is (delete if not used)
concept alt5
                              $$ copy as is (delete if not used)
```

#### MONIFORM7 (Uncompleted) Constructed Response

```
unit
          form7
                              $$ r form7 with your unit name
next
          nextu
                              $$ r nextu with your next unit
define
          form1
                              $$ copy as is
zero
          v(offset),88
                              $$ copy as is
                              $$ add screen position to start
calc
          pos &
write
          ∢ ar,pos>
                              $$ add line 1 of question
          $$
                              $$ r first $$ with line 2 of question
          $$
                              $$ r first $$ with line 3 of question
          $$
                              $$ r first $$ with line 4 of guestion
calc
          lines&
                              $$ add # question lines used
          form7
                              $$ r form7 with your unit name
vocabs
          <zz.zz.zz>
                              $$ r zz's with optional words
          (catext,zzzz)
                              $$ r zz's with correct answer
                              $$ r wrong 1 with incorrect answer 1
          (alt1, wrong1)
                              $$ r wrong 2 with incorrect answer 2
          (alt2,wrong2)
          (alt3, wrong3)
                              $$ r wrong 3 with incorrect answer 3)
                              $$ r wrong 4 with incorrect answer 4
          (alt4, wrong4)
                              $$ r wrong 5 with incorrect answer 5
          (alt5,wrong5)
pack
          temp,catext,
                              $$ add correct answer (one only)
pack
          temp,caf,
                              $$ add correct answer feedback
pack
          temp, taf,
                              $$ add feedback for wrong answer 1
pack
          temp, taf2,
                              $$ add feedback for wrong answer 2
                              $$ add feedback for wrong answer 3
pack
          temp, taf3,
          temp, taf4,
                              $$ add feedback for wrong answer 4
pack
          temp, taf5,
                              $$ add feedback for wrong answer 5
pack
                              $$ add general feedback 1
pack
          temp, waf,
pack
          temp, waf2,
                              $$ add general feedback 2
                              $$ add general feedback 3
pack
          temp,waf3,
pack
          temp, waf4,
                              $$ add general feedback 4
calc
          ntaf &
                              $$ add # of general fdbacks used
                              $$ add # attempts student permitted
         notries &
         assist &
                              $$ add: instr-for instructor assistance OR
                              $$ add: answer-correct answer given OR none
          pos & pos + (lines x 100)
                                        $$ copy as is
          pos + 200
                              $$ copy as is
arrow
          $$
specs
                              $$ r first $$ with desired specs
ioin
          drive16
                              $$ copy as is
nextnow remed=0,x,otheru,
                              $$ r otheru with name remed unit
goto
          ansok, drive 14, drive 18,
                                           $$ copy as is
concept catext
                              $$ copy as is
concept alt1
                              $$ copy as is (delete if not used)
concept alt2
                              $$ copy as is (delete if not used)
concept alt3
                              $$ copy as is (delete if not used)
                              $$ copy as is (delete if not used)
concept alt4
concept alt5
                              $$ copy as is (delete if not used)
```

# MONIFORM8 (Uncompleted) Matching

define form1 \$\$ copy as is  zero v(offset),85 \$\$ copy as is  *enter ID mode to insert your question. NOTE THE FOLLOWING:  *1. Max of 9 match questions (items) numbered 1 thru N  *2. Do not include match answers (these are packed below)  *3. Do not include instructions for moving pointer  *4. Graphics may be included in matching question  *5. Note screen position of 1st matching question (enter it  * below after the arrow in "calc posA ← ")  *6. NOTE: See "Sample Question" & "Completed MONIFORM" in  * lesson "moniform" (student) for help, if necessary  pack temp,match1, \$\$ add match answer item 1  pack temp,match2, \$\$ add match answer item 2  pack temp,match3, \$\$ add match answer item 3  pack temp,match4, \$\$ add match answer item 3  pack temp,match5, \$\$ add match answer item 4  pack temp,match5, \$\$ add match answer item 5  pack temp,match6, \$\$ add match answer item 5  pack temp,match7, \$\$ add match answer item 7  pack temp,match8, \$\$ add match answer item 8  pack temp,match9, \$\$ add match answer item 9  pack temp,caf, \$\$ add correct answer feedback  calc posA ← \$\$ add screen position of first  \$\$ match question  posB ← \$\$ add screen position for first					
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BE NOTE: BE NOTE: BE NOTE: BENEFIT IN A SECURITION OF THE SECURITIES AND A SECURITIES					
posB ⇔ \$\$ add screen position for first					
\$\$ match answer					
pos ← \$\$ add line # for feedbacks to begin					
\$\$ (no greater than 28)					
noalt ← \$\$ add # match questions used					
notries \$ \$\$ add # attempts student permitted					
assist ← \$\$ add: instr—for instructor assistance O					
\$\$ add: answer—correct answer given OF	none				
join drive19 \$\$ copy as is					
를 하면서 하는 것은 사이트를 가는 것이 되었다. 그는 그는 그는 그는 사람들은 이 나를 가는 것이 되었다. 그는 그는 그는 그는 사람들은 살이 되었다. 그는 사람들은 살이 없는 것은 사람들은 것이 없었다.	rightT=noalt,nextu,review, \$\$ r nextu with next unit				
\$\$ r review with unit S					
\$\$ goes if answ given him					

# MONIFORM9 (Uncompleted) Matching

unit	form9	\$\$ r form9 with your unit name
zero	n(offset),13	\$\$ copy as is
*Go to	"ID" mode to ins	ert your question. Note the following:
*1. Yo	ou are limited to 1	matching items
*2. Ar	nswers must be lett	ers (i.e., a, b, c, d, etc.)
*3. No	te the screen posit	tion of where you want the first
* arr	ow to appear	
*4. Th	e -pack- command	below requires the "correct answer
* str	ing" to be added (	e.g., temp2,n(offset + 1),dafebc)
pack	temp2,n(offset	1), \$\$ add correct answ string
pack	temp2,caf1,	\$\$ add correct answer message
calc	arrow1¢	\$\$ add position for first arrow
	noalt¢	\$\$ add # of matching items used
	notries <b>⟨</b> =	\$\$ add # of times thru items allowed
	space ¢	\$\$ add 1, 2, or 3 for spaces btwn items
	assist ←	\$\$ add: instr-for instructor assistance OR
		\$\$ add: answer-correct answer given OR non-
join	drive3Ø	\$\$ copy as is
next	totcor=noalt,nex	ktu,otheru, \$\$ r nextu with next unit
		\$\$ r otheru with remediation
		\$\$ unit

#### MONIFORM CHARACTERISTICS

Many of the MONIFORMS are similar except for the type of feedback given the student for an incorrect answer. In the MONIFORMS they are called "general" feedbacks and "response specific" feedbacks. They are defined as follows:

General

The feedback given is the same, independent of the specific incorrect answer given by the student. However, different feedbacks may be given for successive attempts at the question.

Response Specific

The feedback given is dependent upon the specific incorrect response given by the student.

# Use the following definitions in examining the Index below:

random	=	answer alternatives presented in random order
non-random	=	answer alternatives presented in order specified
		by author
general	=	general wrong answer feedbacks (not response
		specific)
specific	=	response specific wrong answer feedbacks

# **INDEX OF MONIFORM CHARACTERISTICS**

E-3	MONIFORM1—random/general		
E-4	MONIFORM2—non-random/genera		
E-5	MONIFORM3—random/specific		
E-6	MONIFORM4—non-random/specifi		
Constructe	ed Response		
E-7	MONIFORM5—general		
E-8	MONIFORM6-specific		
E-9	MONIFORM7—general/specific		
Matching			
E-10	Student moves pointer		

Student types answer

**Multiple Choice** 

Page

E-11

# MONIFORM1 CHARACTERISTICS (Multiple Choice)

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-12	One correct answer (40 characters long)
E-13	1-4 distractors (40 characters long)
E-14	Answer alternatives presented in random order
E-15	Option of having long 1 feature
E-16	Author specifies # of attempts student is allowed
E-17	1 author specified correct answer feedback
E-18	1-4 author specified general feedbacks
E-19	Unanticipated response feedback
E-20	Author specifies type of assistance student receives when try limit reached (instr,answer, none)
E-21	2 author specified branching units

# MONIFORM2 CHARACTERISTICS (Multiple Choice)

All characteristics are identical to MONIFORM1 except:

MONIFORM1-answer alternatives presented in random order

MONIFORM2—answer presented in <u>order</u> specified by author

Turn to page E-3 to see characteristics of MONIFORM1.

# MONIFORM3 CHARACTERISTICS (Multiple Choice)

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-12	One correct answer (40 characters long)
E-13	1-4 distractors (40 characters long)
E-14	Answer alternatives presented in random order
E-15	Option of having long 1 feature
E-16	Author specified # of attempts student is allowed
E-17	1 author specified correct answer feedback
E-22	1-5 response specific incorrect answer try again feedbacks
E-19	Unanticipated response feedback
E-20	Author specified type of assistance student receives when try limit reached (instr,answer, none)
E-21	2 author specified branching units

### MONIFORM4 CHARACTERISTICS (Multiple Choice)

All characteristics are identical to MONIFORM3 except:

MONIFORM3-answer alternatives presented in random order

 $\begin{array}{c} \text{MONIFORM4--answer alternatives presented in } \underline{\text{order}} \\ \text{specified by author} \end{array}$ 

Turn to page E-5 to see the characteristics of MONIFORM3.

### MONIFORM5 CHARACTERISTICS (Constructed Response)

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-23	Synonymous answers (or phrases) permitted
E-24	Optional words permitted in answer
E-25	Author selected specification for judging of student answer (only specs permitted with -concept- command)
E-17	1 author specified correct answer feedback
E-16	Author specified # of attempts student permitted
E-26	1-4 author specified general (not response specific) incorrect answer try again feedbacks
E-19	Unanticipated response feedback
E-20	Author specified type of assistance student receives when try limit reached (instr, answer, none)
E-21	2 author specified branching units

# MONIFORM6 CHARACTERISTICS (Constructed Response)

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-23	Synonymous answers (or phrases) permitted
E-24	Optional words permitted in answer
E-25	Author selected specification for judging of student answer (only specs permitted with -concept- command
E-17	1 author specified correct answer feedback
E-22	1-5 response specific incorrect answer try again feedbacks
E-27	1 general incorrect answer try again feedback
E-16	Author specified # of attempts student permitted
E-19	Unanticipated response feedback
E-20	Author specified type of assistance student receives when try limit reached (instr, answer, none)
E-21	2 author specified branching units

### MONIFORM7 CHARACTERISTICS (Constructed Response)

MONIFORM7 is a combination of MONIFORM5 and MONIFORM6. That is, in MONIFORM5 only "general" feedbacks (not response specific) are presented to the student for incorrect answers; in MONIFORM6 response specific feedbacks are given.

MONIFORM7 provides the student with both "general" and "response specific" feedbacks.

Do not use MONIFORM7 when MONIFORM5 or 6 will satisfy your needs inasmuch as MONIFORM7 uses a little more ecs for question execution.

Turn to page E-7 to see the characteristics for MONIFORM5. Turn to page E-8 to see the characteristics for MONIFORM6.

# MONIFORM8 CHARACTERISTICS (Matching)

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-28	Maximum of 9 matching items permitted
E-29	Matching answer alternatives presented in random order
E-30	Student moves pointer to select match
E-31	After completing all matches, student given opportunity to change answers
E-16	Number of attempts at entire problem specified by author
≣-32	MONIFORM provided feedback stating number or correct matches made on each attempt
-17	Author specified correct answer feedback
-33	3 types of author specified assistance given
-34	2 branching units

# MONIFORM9 CHARACTERISTICS (Matching)

For additional information on any MONIFORM characteristic, listed below, turn to the page indicated.

Page	
E-35	Maximum of 10 matching items permitted (order specified by author
E-36	Single, double, or triple spacing permitted between matching items
E-37	Graphic displays may be incorporated into matching problem
E-38	Student permitted to match items in any order desired
E-39	Student permitted to change answers before final judging
E-16	Number of attempts at entire problem specified by author
E-17	Author specified correct answer feedback
E-40	Student informed of specific incorrect matches made
E-41	3 types of author specified assistance given
E-34	2 types of branching

#### Correct answer text is:

- What you specify as the text for the correct answer.
- 2. Limited to 40 characters (shifted characters count as 2 characters)
- Presented in random order (as are the distractors).
   For example, the correct answer may be presented as "1" to student "A" and "6" to student "B".

#### Distractors are:

- 1. Incorrect answer alternatives that you provide.
- 2. Limited to 40 characters (shifted characters count as 2).
- Presented in random order (as is the correct answer).
   For example, the distractor you write for (dist1) may appear as answer alternative 1 thru 6. Therefore, you need not worry about the order in which you put them in the MONIFORM.

Answer alternatives (i.e., correct answer and distractors) are presented to the student in random order. For example, the correct answer may be "3" for student "A" whereas it may be "6" for student "B".

The long1 feature permits you to decide whether you want judging to begin as soon as the student enters an answer, or whether you want him to press NEXT before judging begins.

This option permits you to designate the number of incorrect attempts the student will be permitted.

The correct answer feedback is:

- The congratulatory message you wish to give the student if he gives the correct answer.
- 2. Limited to 40 characters (shifted characters count as 2).

General feedbacks are attempt-related rather than response-related. That is, on the first incorrect attempt at the question the student will receive general feedback1; on the second incorrect attempt, general feedback2; etc. (For multiple choice questions this is independent of the specific wrong answer given by the student.)

If the student does not enter an answer or enters an answer outside of the answer alternative range (multiple choice), she is given a MONIFORM generated feedback.

This option permits you to designate the type of assistance the student will receive if he is still incorrect after the number of attempts that you have specified (for notries) is reached.

There are three types of assistance available:

- (1) instr A message appears: Please Call Your Instructor. The keyboard locks until instructor types: unlock. The student re-tries the question.
- (2) answer A message appears: The correct answer is: (correct answer). Student is then branched to an author specified remediation type unit.
- (3) none No assistance is given. The student is branched to an author specified remediation type unit.

In all MONIFORMS the author may specify two different units that the student will be branched to depending upon his response to the question and the type of assistance that the author has specified:

- (1) The unit that the student will be branched to if the question is answered correctly.
- (2) The unit the student will be branched to if the attempt limit is reached and the author has specified that he be given the correct answer. After being given the correct answer he may be branched to a unit other than the one he would go to if he answered the question correctly. This feature allows the author to provide remediation type instruction to the student. (If the author does not wish remediation instruction he would enter the same unit in both cases.) NOTE: If the author specifies that the instructor be called to provide assistance, branching to a remediation type unit is not permitted.

Response specific feedbacks are those feedbacks that the author provides for specific wrong answers. That is, the feedback the student receives is dependent upon the specific wrong answer that is given. After receiving the feedback, the student re-attempts the question.

You may specify the "correct" answer as being a single word or a phrase. You may also specify synonymous words and phrases to be judged as correct. NOTE: Since these MONIFORMS use the concept- and -vocab- commands for answer judging, be certain that you understand how phrases and synonymous words are coded with these commands.

The author may designate optional words that may be included in the student's answer that will not affect judging. However, inasmuch as these MONIFORMS use -vocab- and -concept- commands for judging, optional words will not be accepted that come in the middle of an answer consisting of a phrase (i.e., optional words must precede or follow the correct answer).

You have the option of having any "specs" that you wish used for judging the student's answer.

NOTE: These MONIFORMS use the -concept- command for execution. Not all "specs" work with the -concept- command. Only the "specs" listed will work:

best bumpshift nomark nookno noorder okcap okspell okxvocab

See Lesson AIDS for explanation.

General feedbacks are attempt-related rather than response-related. That is, on the first incorrect attempt at the question the student will receive general feedback1; on the second incorrect attempt, general feedback2; etc.

You are permitted one "general" feedback to be used in cases where the student gives an answer other than one that you have specified.

You may have as many as 9 matching items with MONIFORM8.

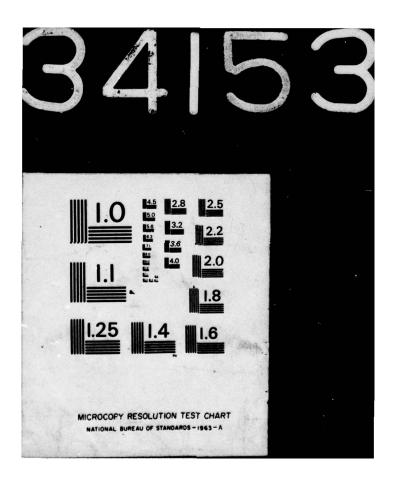
The match alternatives (answer alternatives) are presented in random order to the student. Therefore, when you write these you may disregard the order in which they are written.

Match alternatives are limited to 40 characters. (Shifted characters count as 2.) NOTE: Be certain when you indicate where you want these alternatives to appear on the screen that you have allowed for sufficient space.

Match items (answer alternatives) are presented to the student in random order.

The student selects his match (answer) to a specific matching item by moving a pointer (→) up and down by pressing the "w" and "x" keys. When the pointer is positioned where he wants it he presses NEXT to have his answer recorded.





Each time the student has completed the entire matching problem he receives the following message:

"Check your answers carefully. To change any of them press the 'r' key to rework the problem. Otherwise, press NEXT. Remember, you must have a number next to each alternative."

If he does indeed press the "r" key his previous answers will be erased and he must re-do the entire problem.

Each time the student has completed all matching items he is informed of the number of correct matches that he made on that time through the matching question. He then re-tries the entire problem. Note, however, that he is not told which item he matched correctly.

This option permits you to designate the type of assistance the student will receive if his answers are still incorrect after he reaches the number of attempts that you have specified (for notries).

There are three types of assistance available:

- (1) instr A message appears: Please Call Your Instructor. The keyboard locks until instructor types: unlock. The student re-tries the question.
- (2) answer The student is given the correct answers to all matching items.
- (3) none No assistance is given. The student is branched to an author specified remediation type unit.

#### The author specifies two branching units:

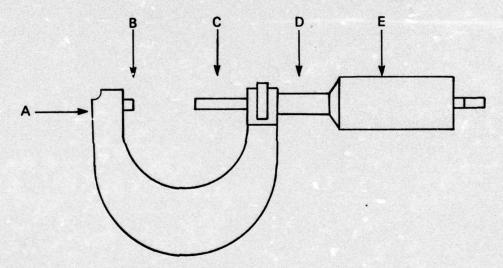
- (1) The unit the student will go to if he gets the entire matching problem correct.
- (2) The unit he goes to if the attempt limit is reached and he still has one or more incorrect matches. This can be a remediation type unit or it could be the same unit as the one he goes to if he answers them all correctly.

The author is permitted to have a maximum of 10 matching items. These are entered in "ID" Mode.

When you are writing your matching question (in ID Mode) you may have single, double, or triple spacing between matching items.

You may use graphic displays in your matching question as shown in the example below.

#### EXAMPLE:



Match the parts of the micrometer shown above. Type the appropriate letters below.

- > 1. barrel
  - 2. frame
  - 3. thimble
  - 4. spindle
  - 5. anvil

The student is permitted to answer the individual matching items in any order that he chooses. He may use the NEXT key to advance the arrow to a new item, or he may use the BACK key to backup the arrow.

The student may change his answer to any matching item by repositioning the arrow with the NEXT and BACK keys and then entering a new response.

Each time the student has completed the entire matching problem he is informed of the specific items he has matched incorrectly. He then re-tries these items.

This option permits you to designate the type of assistance the student will receive if his answers are still incorrect after he reaches the number of attempts that you have specified (for notries).

There are three types of assistance available:

- (1) instr A message appears: Please Call Your Instructor. The keyboard locks until instructor types unlock. The student re-tries the question.
- (2) answer The student is given the correct answers for incorrectly matched items.
- (3) none No assistance is given. The student is branched to an author specified remediation type unit.

## **HOW TO USE MONIFORMS**

There are 6 Steps that must be completed to use HumRRO MONIFORMS.

After you have completed your first MONIFORM, we feel that you will rarely have to refer to this section of the lesson again.

In the 6 Steps that follow we have included, where appropriate, reference to sections in the Main Index which provide additional assistance in completing the particular step.

Read through the entire 6 Steps. Then, if you have any questions about a particular Step, refer to the referenced material in the Main Index.

- a. Select the specific MONIFORM you wish to use.
- Be certain you are familiar with its characteristics. You may be expecting something from the MONIFORM it was not designed to provide.

ASSISTANCE AVAILABLE FROM MAIN INDEX

**MONIFORM Characteristics** 

Sample Questions

After selecting the MONIFORM you plan to use, PLEASE leave a personal note providing the following information:

- (1) MONIFORM being used
- (2) Date

The above information is important for the following reasons:

- It gives us a guide as to which MONIFORMS are being used and thus where we should place our emphasis in MONIFORM development.
- (2) It will permit us to contact you should a "bug" be discovered in the MONIFORM. (We don't expect this to happen because each MONIFORM is carefully debugged before release.)

Address note to:

re schulz-course: hum

- a. Copy Unit "setup" into your lesson ONE TIME ONLY.
  Unit "setup" should be in your lesson only once regardless of how many MONIFORMS you have used.
- b. Copy the selected MONIFORM into your lesson.

Note: Unit "setup" and all MONIFORMS are located in lesson "hum8" which must be entered in AUTHOR MODE.

Revise Unit "setup" as directed by the instructions that follow the \$\$.

- Be certain PLATO executes Unit "setup" before it reaches the first MONIFORM.
- b. MONIFORMS use student variables for execution (sometimes as many as 72). We always begin with v5Ø (e.g., v5Ø-v121). You may change the variable you begin with by changing the value of "offset" in Unit "setup".
- Be certain you have included all necessary

   use- commands.

ASSISTANCE AVAILABLE FROM MAIN INDEX

Unit "setup"

Variables Used

Revise the MONIFORM as directed by the instructions following the \$\$.

- Most revisions can be made while in "replace" mode.
- b. "r" means replace.
- c. "add" means to add the requested information immediately after the final comma, the ←, or the ▶.
- d. "Copy as is" means to copy everything except the \$\$ and the instructions that follow the \$\$.

### ASSISTANCE AVAILABLE FROM MAIN INDEX

Completed MONIFORMS

Assistance with Code Completion

Try your question in student mode to see if it executes properly.

## ASSISTANCE AVAILABLE FROM MAIN INDEX

**Debugging Your Question** 

**Assistance With Code Completion** 

Completed MONIFORMS

Variables Used

Unit "setup"

**HumRRO Drive Units Used** 

## SUMMARY

Total Services

0

Step	Reference in Main Index
I. Select MONIFORM and know	MONIFORM Characteristics
characteristics	Sample Questions
2. Leave personal note to:	
re schulz-course: hum	
3. Copy Unit "setup" and MONIFORM	
into your lesson from hum8	
I. Revise Unit "setup"	Unit "setup"
	Variables Used
5. Revise MONIFORM	Completed MONIFORMS
	Assistance With Code
	Completion
3. Try question in student	Debugging Your Question
mode	Assistance With Code
	Completion
	Completed MONIFORMS
	Variables Used
	Unit "setup" HumRRO Drive Units Used

#### **UNIT SETUP**

It is important that you understand the characteristics of Unit "setup" inasmuch as it is the heart of the MONIFORM concept. It is the unit that permits you to use HumRRO code for execution of your MONIFORM questions.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE:	Place a star (*) i	n front of any -use- statement,
*below, no	t necessary for ex	ecution of the MONIFORM(S)
*you are us	sing in your lessor	n. This will save you ecs.
*(Do not d	elete since you m	ay use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
usc	drivef	\$\$ used only with moniform9

Unit "setup" is located in lesson hum8. It is the unit that allows you to use HumRRO code for question execution without the need for you to copy the code into your lesson space.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE:	Place a star (*) in	front of any -use- statement,
*below, no	t necessary for exec	cution of the MONIFORM(S)
*you are us	sing in your lesson.	This will save you ecs.
*(Do not d	elete since you may	use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

Unit "setup" should be copied into your lesson ONLY ONE TIME. It must come before use of any MONIFORM.

unit

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE	: Place a star (*) i	n front of any -use- statement,
*below, n	ot necessary for ex	ecution of the MONIFORM(S)
*you are	using in your lesson	. This will save you ecs.
*(Do not	delete since you ma	ay use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

Look at the entry "offset" in Unit "setup". Offset is now set at 50. This means that the sequence of student variables used in the MONIFORM for question execution will begin with v50. If you want to begin with some other student variable change "50" to the number you wish to begin with. Keep in mind, however, that if the MONIFORM you wish to use requires 68 student variables, offset cannot be set at greater than 82. (This would mean you were using variables v82-v150.) See page H-1 to find out the number of variables used with each MONIFORM.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE:	Place a star (*) in	front of any -use- statement,
*below, no	t necessary for exec	eution of the MONIFORM(S)
*you are us	sing in your lesson.	This will save you ecs.
*(Do not d	elete since you may	use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

You will also notice in Unit "setup" several -use- commands. Each of these indicates the HumRRO block in hum9 needed for execution of specific MONIFORMS (i.e., shown after the double dollar sign (\$\$)). To decrease the amount of ecs you use place a star before any -use- command in which that block of HumRRO coding is not needed for the questions used in your lessons. (Do not delete inasmuch as you may use these -use- commands for later MONIFORMS.)

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE:	Place a star (*) in	front of any -use- statement,
*below, no	t necessary for exec	cution of the MONIFORM(S)
*you are us	sing in your lesson.	This will save you ecs.
*(Do not d	elete since you may	use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

If you have a -use- command someplace in your lesson other than in Unit "setup", read the remainder of this section.

If you do not have a -use- command elsewhere in your lesson return to the Main Index.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTIC	E: Place a star (*) i	n front of any -use- statement,
*below,	not necessary for ex-	ecution of the MONIFORM(S)
*you are	e using in your lesson	n. This will save you ecs.
*(Do no	ot delete since you ma	ay use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

DO NOT USE this procedure unless you have previously used a -use- command elsewhere in your lesson.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE	: Place a star (*) i	n front of any -use- statement,
		ecution of the MONIFORM(S)
		n. This will save you ecs.
		ay use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9
	ulivei	as used only with moniform9

You may copy HumRRO "drive units" directly into your lesson from lesson hum9 (author mode). Pages I-3 and I-4 indicate the specific drive units used with each MONIFORM. All of the code necessary for question execution will thus reside in your lesson space rather than in HumRRO lesson space. This procedure, however, reduces somewhat the value of MONIFORMS.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE:	Place a star (*) in	front of any -use- statement,
*below, no	t necessary for exec	cution of the MONIFORM(S)
*you are u	sing in your lesson.	This will save you ecs.
*(Do not d	lelete since you may	use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

If you copy the HumRRO "drive units" into your lesson, change Unit "setup" by deleting all lines beginning with the -use- command.

unit	setup	
define	form2	
	offset = 50	\$\$ you may specify another number
jump	form	\$\$ r form with name of your 1st unit
use	hum9,definea	\$\$ used with all moniforms
*NOTICE:	Place a star (*) in	front of any -use- statement,
*below, no	t necessary for exec	cution of the MONIFORM(S)
*you are us	sing in your lesson.	This will save you ecs.
*(Do not d	elete since you may	y use them in later MONIFORMS.)
use	drivea	\$\$ used with moniforms1,2,3,4,5,6,7,9
use	driveb	\$\$ used with moniforms1,2,3,4,5,6,7
use	drivec	\$\$ used only with moniform8
use	drived	\$\$ used only with moniform8
use	drivee	\$\$ used only with moniforms8 and 9
use	drivef	\$\$ used only with moniform9

Turn to page I-1 for a listing of HumRRO "drive units" used with each MONIFORM.

### STUDENT VARIABLES USED WITH MONIFORMS

MONIFORM	# VARIABLES USED	NOW SET AT*
1	68	v5Ø-v117
2	68	v5Ø-v117
3	72	v5Ø-v121
4	76	v5Ø-v125
5	68	v5Ø-v117
6	72	v5Ø-v121
7	88	v5Ø-v137
8	85	v50-v134
9	13	v5Ø-v62

\*All HumRRO MONIFORMS are now set to use student variables beginning with v50 (e.g., v50 thru v (# of variables +49)). You may change the variable you start with by changing the value of "offset" in your copy of Unit "setup".

For example, if you wanted to use variables v1-v67 in MONIFORM1 rather than v50-v117 you would have in Unit "setup": offset = 1.

# Humrro Drive Units USED FOR MONIFORM EXECUTION

Information about HumRRO "drive units" used for MONIFORM execution is needed ONLY by individuals who have used a -use- command in their lesson someplace other than in Unit "setup".

If you are already using a -use- command in your lesson (PLATO allows you to use only one additional lesson) it will be necessary for you to copy the specific HumRRO "drive units" necessary for MONIFORM execution into your lesson.

HumRRO "drive units" are located in lesson hum9. Contact Russel E. Schulz for assistance in copying the "drive units" into your lesson.

HumRRO lesson hum9 block location is shown in parentheses.

MONIFORM1		MONIFORM3	
definea	(definea)	definea	(definea
drive1	(drivec)	drive1	(drivec)
drive2	(drivec)	drive2	(drivec)
drive3	(drivec)	drive3	(drivec)
drive4	(drivec)	drive5	(drivec)
drive5	(drivec)	drive6	(drivec)
drive6	(drivec)	drive7	(drived)
drive10	(drived)	drive8	(drived)
drive11	(drived)	drive9	(drived)
drive12	(drived)	drive11	(drived)
		drive13	(drived)
MONIFOR	M2	drive13a	(drived)
definea	(definea)		
drive1a	(drivec)	MONIFORM4	
drive3	(drivec)	definea	(definea)
drive4	(drivec)	drive1a	(drivec)
drive5	(drivec)	drive3	(drivec)
drive6	(drivec)	drive5	(drivec)
drive10	(drived)	drive6	(drivec)
drive11	(drived)	drive7	(drived)
drive12	(drived)	drive8	(drived)
		drive9	(drived)
		drive11	(drived)
		drive13	(drived)
		drive13a	(drived

HumRRO lesson hum9 block location is shown in parentheses.

MONIFORM5		MONIFORM8	
definea	(definea)	definea	(definea)
drive3	(drivec)	drive19	(drivee)
drive5	(drivec)	drive20	(drivee)
drive6	(drivec)	drive21	(drivee)
drive14	(drived)	drive22	(drivee)
drive15	(drived)	drive23	(drivee)
drive16	(drived)	drive24	(drivef)
		drive25	(drivef)
MONIFORM6		drive26	(drivef)
definea	(definea)	drive27	(drivef)
drive3	(drivec)	drive28	(drivef)
drive5	(drivec)	drive29	(driveg)
drive6	(drivec)		
drive14	(drived)	MONIFORM9	
drive16	(drived)	definea	(definea)
drive17	(drived)	drive5	(drivec)
		drive3Ø	(driveg)
MONIFORM7		drive31	(driveg)
definea	(definea)	drive32	(driveg)
drive3	(drivec)	drive33	(driveg)
drive5	(drivec)	drive34	(driveg)
drive6	(drivec)	drive35	(driveg)
drive14	(drived)	drive36	(driveg)
drive16	(drived)	drive37	(driveg)
drive18	(drived)		

## ASSISTANCE IN MONIFORM COMPLETION

In some instances the instructions that follow the \$\$ in MONIFORMS are not sufficiently clear for all individuals.

This section provides a list of MONIFORM coding lines. The user may reference this list to obtain additional assistance in completing his MONIFORM.

Generally, it is not necessary to examine this section unless you are having difficulty in completing a specific MONIFORM.

```
Page
J-3
            (alt1, wrong)
J-4
            answ &
J-5
            assist ¢
J-6
            calc
                           arrow1 ¢
J-7
            calc
                           lines &
J-8
            calc
                           nodist ¢
J-9
                           ntaf ¢
            calc
J-10
            calc
                           pos &
J-11
            calc
                           posA ⟨=
J-12
            (catext,zzzz)
J-13
            concept alt1 (thru alt5)
                           rightT=noalt,nextu,review,
J-14
            jump
J-15
            long1 ¢
            noalt 
⇔
J-16
            notries ⇐
J-17
J-18
            next
                           nextu
J-19
                           remed > 0, otheru, x,
            nextnow
J-20
            nextnow
                           remed = \emptyset,x, otheru,
J-21
            pack
                           temp,alt1, (thru temp,alt6)
J-22
            pack
                           temp,caf
J-23
            pack
                           temp,catext,
J-24
            pack
                           temp,dist1, (thru temp,dist5)
J-25
                           temp,match1, (thru temp,match9,)
            pack
J-26
            pack
                           temp,waf, (thru temp,waf4)
J-27
            pack
                           temp2,caf1,
J-28
            pack
                           temp2,n(offset + 1),
J-29
            pos ¢
                           (as used in MONIFORM8 only)
J-30
            posB ¢
J-31
            space ¢
J-32
                           $$
            specs
J-33
                           form5 (6 or 7)
            vocabs
J-34
            < zz,zz,zz >
```

```
(alt1,wrong1) $$ r wrong1 with incorrect answer 1
(alt2,wrong2) $$ r wrong2 with incorrect answer 2
(alt3,wrong3) $$ r wrong3 with incorrect answer 3
(alt4,wrong4) $$ r wrong4 with incorrect answer 4
(alt5,wrong5) $$ r wrong5 with incorrect answer 5
```

"r" means replace.

You may specify as many as 5 specific wrong answers for which you will give specific feedbacks. In the code above you replace wrong1, wrong2, etc. with the specific "incorrect" answers. They can consist of single words, phrases, or synonymous words or phrases.

Since this MONIFORM uses the -vocabs- command, the way the wrong answer is coded is different from that of the -wrong- command. NOTE the following examples carefully.

#### **EXAMPLES**

(alt1, wronganswer)

Wrong answer: wronganswer

(alt2, wrong \* answer)

Wrong answer: wrong answer

(alt3, Alexandria \* Virginia, Alexandria \* Va)

Wrong answer: Alexandria, Virginia or Alexandria, Va.

(alt4,4\*th\*of\*July,Fourth\*of\*July)

Wrong answer: 4th of July or Fourth of July

answ ¢

\$\$ add the # of the alternative which \$\$ is the correct answer

You were instructed earlier in the MONIFORM to provide 2-6 answer alternatives, one of which was to be the correct answer. Since you specify the order in which the answer alternatives are presented to the student, PLATO must be told which answer alternative is the correct answer. You add it immediately after the arrow.

Your entry must be a number between 1 and 6.

#### **EXAMPLE**

answ ← 3 (The 3rd answer alternative that you wrote is the correct answer.)

assist \$ \$\$ add: instr—for instructor assistance OR \$\$ add: answer-answer given; OR add: none

This option permits you to designate what type of assistance the student will receive if he is still incorrect after the number of attempts that you have specified (for notries) is reached.

#### **EXAMPLE**

- (1) assist 

  After the n<sup>th</sup> try student receives message

  "Please Call Your Instructor". Keyboard is locked until instructor gives assistance and types: unlock.
- (2) assist 

  answer

  After the n<sup>th</sup> incorrect try the correct answer is
  given to the student and he is branched to another
  author specified unit. (This unit may be used to
  provide remediation instruction, or it could be
  the same unit he would go to if he answered the
  question correctly.)
- (3) assist ← none No assistance is given the student. He is just branched to another author specified unit.

calc arrow1 ← \$\$ add position for first arrow

In this MONIFORM the arrow is used for two purposes: (1) as a place for the student's answer, and (2) to mark the matching item that he is currently working on. You must therefore determine the screen position of the first matching item and then subtract 5 from this value. This is the value you add immediately after the arrow. NOTE: The screen position you add must be greater than 5 (e.g., 1806) to allow for presentation of correct answers and "no" feedback.

#### **EXAMPLE**

This is screen position 1815

1. Matching item 1 a. answer 2
2. Matching item 2 b. answer 4
3. Matching item 3 c. answer 1
4. Matching item 4 d. answer 3

In this example -arrow1- is therefore set at: 1810 (1815-5=1810) The arrow will then be presented at the ≥, as shown. (e.g., calc arrow1 ← 1810)

calc lines &

\$\$ add # question lines used

In MONIFORMS that use this line of code you have been instructed to write 1-4 lines of question text. (In the case of Multiple Choice questions this does not include answer alternatives.) Inasmuch as you may not require the full 4 lines for asking your question, PLATO needs to know how many lines you actually required. You add this number immediately after the &.

#### **EXAMPLE**

calc lines  $\Leftarrow$  3 (indicating you used 3 lines of question text)

Earlier in the MONIFORM you were instructed to write 1-5 distractors (MONIFORMS1 and 3) or 1-6 answer alternatives (MONIFORMS2 and 4). PLATO needs to know exactly how many you actually wrote. Add this number immediately after the &.

### **EXAMPLE**

calc nodist ← 4 (This means you wrote 4 distractors/ alternatives.)

calc ntaf ← \$\$ add # of try again feedbacks used
OR
calc ntaf ← \$\$ add # of general feedbacks used

## MONIFORMS1,2, and 5

Earlier in the MONIFORM you were asked to write text for 1-4 try again feedbacks (general incorrect answer messages). PLATO needs to know the actual number that you wrote. Add the number written immediately after the &.

#### MONIFORM7

In this MONIFORM you were asked to write text for general (not response specific) feedbacks. Again, PLATO needs to know the actual number written. Add the number written immediately after the &.

#### **EXAMPLE**

calc ntaf ← 2 (meaning 2 try again feedbacks, or 2 general feedbacks were written)

calc pos & \$\$ add screen pos. to begin question

Within certain restrictions you may have your question appear any place that you wish on the screen. Add the screen position that you wish to have as the starting point for your question immediately after the &.

NOTE: Be certain that you do not specify a position so low on the screen that there will not be enough room for your question and any feedbacks that the student might receive.

Inasmuch as the feedbacks that you provide may be 40 characters in length (and limited to <u>one</u> line) be certain that you do not begin your question too far to the right of the screen.

#### EXAMPLE

calc pos & 1010 (Your question would begin at line 10, character position 10.)

calc posA ← \$\$ add screen position of first \$\$ match question

In this MONIFORM two columns are required which we arbitrarily designate as Column A and Column B below (you need not label them). Column A is a list of the match questions, and Column B is a list of answer alternatives.

The arrow indicating which match question the student is working on appears a few spaces to the right of Column A entries. PLATO needs to know where your Column A entries begin. Therefore, enter the screen position immediately after the > for the beginning screen position of match question 1.

#### **EXAMPLE**

This is screen position 1815

Column A Column B

1. Match question 1 Answer 3
2. Match question 2 Answer 1
3. Match question 3 Answer 2

calc posA ← 1815 (In this example the first arrow would appear as shown by the ▶.)

# (catext,zzzz) \$\$ r zz's with correct answer

The correct answer can be a single word, a phrase, or synonymous words or phrases. Replace the "zz's" with your correct answer. Separate synonymous words or phrases with commas (,). Separate words in a phrase with stars (\*).

Since this MONIFORM uses the -vocabs- command, the way the correct answer is coded is different from that of the -answer- command. NOTE the following examples carefully.

#### **EXAMPLES**

(catext, rightanswer)

Answer: rightanswer

(catext,right\*answer)

Answer: right answer

(catext, Alexandria \* Virginia, Alexandria \* Va)

Answer: Alexandria, Virginia or Alexandria, Va.

(catext,4\*th\*of\*July,Fourth\*of\*July

Answer: 4th of July or Fourth of July

concept alt1	\$\$ copy as is (delete if not used)
concept alt2	\$\$ copy as is (delete if not used)
concept alt3	\$\$ copy as is (delete if not used)
concept alt4	\$\$ copy as is (delete if not used)
concept alt5	\$\$ copy as is (delete if not used)

Earlier in the MONIFORM you specified 1 to 5 specific wrong answers: (alt1,wrong1); (alt2,wrong2); etc.

If you specified fewer than 5, it is important that you delete any of the lines of coding above that do not correspond to a specific wrong answer.

jump rightT=noalt,nextu,review, \$\$ r nextu with next unit \$\$ r review with unit \$\$ spees if answ given him

"r" means replace.

Replace "nextu" with the name of the unit that you wish the student to be branched to if he gets all items on the match question correct.

Replace "review" with the name of the unit that you wish the student to be branched to if he is still not entirely correct after the number of attempts permitted is reached. He will only go to this unit if you have specified that the correct answers are to be given him. (i.e., assist answer). NOTE: This unit can be the same as "nextu" if you wish, or it could be a review type unit.

#### **EXAMPLES**

jump rightT=noalt,coransw,wr-answ,

jump rightT=noalt,anyans,anyans,

long1 ← \$\$ add 1 for immed. judging (long1); add Ø \$\$ if S must 1st press next to judge answ.

You have the option of having judging of the student's answer begin immediately after he has entered a single character, or having judging begin only after he enters an answer and presses NEXT.

#### **EXAMPLES**

- long1 ← 1 (Judging begins as soon as single character is entered.)
- long1 ← Ø (Judging begins only after answer is entered and student presses NEXT.)

noalt 4 \$\$ add # match questions used

In MONIFORM8 you are permitted to write as many as 9 match questions (items), while in MONIFORM9 you may write as many as 10. PLATO needs to know the actual number you wrote. Add this number immediately after the &.

#### EXAMPLE

noalt ← 7 (indicates you wrote 7 match questions/items)

# notries \( \ \\$\ \\$\ add \( \#\ \) attempts student permitted

The number you add after the  $\Leftrightarrow$  indicates the number of attempts at the question you wish the student to have.

#### **EXAMPLE**

notries 

(student permitted 3 attempts.) NOTE:

If you are using MONIFORMS in which students are given general feedbacks, in this example you would need to write only 2 feedbacks. The student would not see additional ones because of the limitation on attempts permitted.

next nextu \$\$ r nextu with unit name S goes to \$\$ if he gives correct answer

"r" means replace.

Replace "nextu" with the name of the unit you wish the student to be branched to if he answers the question correctly.

#### **EXAMPLE**

next coransw (coransw is a unit name)

nextnow remed > Ø,otheru,x, \$\$ r "o

\$\$ r "otheru" with unit S \$\$ goes if answ given him

"r" means replace.

You have earlier specified the number of attempts that you wish the student to have at the question. If she is still incorrect after she has reached this limit you may have specified that she be given the correct answer and then branched to another unit.

Therefore, replace "otheru" with the unit you wish her branched to. (It can, of course, be the same unit that you branch her to if she gets the question correct.)

NOTE: If you have elected to have the instructor called (i.e., assist & instr) rather than giving the student the correct answer, you may replace "otheru" with "x" or delete the entire line of code.

#### **EXAMPLE**

nextnow remed > Ø,helpu,x,

nextnow remed = 0,x,otheru, \$\$ r "otheru" with unit S \$\$ goes if answ given him

"r" means replace.

You have earlier specified the number of attempts that you wish the student to have at the question. If he is still incorrect after he has reached this limit you may have specified that he be given the correct answer and then branched to another unit.

Therefore, replace "otheru" with the unit you wish him branched to. (It can, of course, be the same unit that you branch him to if he gets the question correct.)

NOTE: If you have elected to have the instructor called (i.e., assist & instr) rather than giving him the correct answer, you may replace "otheru" with "x" or delete the entire line of code.

#### **EXAMPLE**

nextnow remed = Ø,x,helpu,

pack	temp,alt1,	\$\$ add answer alternative 1
pack	temp,alt2,	\$\$ add answer alternative 2
pack	temp,alt3,	\$\$ add answer alternative 3
pack	temp,alt4,	\$\$ add answer alternative 4
pack	temp,alt5,	\$\$ add answer alternative 5
pack	temp,alt6,	\$\$ add answer alternative 6

You may have as many as 6 answer alternatives in your question. They will appear on the screen in the order that you have written them (i.e., alternative 1 will be first, etc).

One of the answer alternatives must be the correct answer.

Answer alternatives are limited to 40 characters (shifted characters count as 2).

Leave blank (or delete) any lines of code not needed for answer alternatives.

EXAMPLE	Don't for	get this comma
pack	temp,alt1,alternative 1	
pack	temp,alt2,alternative 2	
pack	temp,alt3,alternative 3	(correct answer)
pack	temp,alt4,alternative 4	
pack	temp,alt5,	(not used)
pack	temp,alt6,	(not used)

pack temp,caf, \$\$ add correct answer feedback

You may give the student a congratulatory message (feedback) if he gets the question entirely correct.

This message is limited to 40 characters (shifted characters count as 2). It is written immediately after the final comma. (Don't forget the comma.)

# **EXAMPLE**

pack temp,caf,Congratulations! You are correct.

pack temp,catext, \$\$ add text for correct answer alt OR

pack temp,catext, \$\$ add correct answer (only one)

The material that you add after the comma in the code above is used in two ways, depending upon the MONIFORM you are completing. It is limited to 40 characters (shifted characters count as 2).

# MONIFORMS2, 4, 5, 6, 7

Used only as feedback in those cases where the author has specified that the student be given the correct answer after reaching attempt limit specified.

#### MONIFORMS1 and 3

In MONIFORMS1 and 3 answer alternatives (distractors and the correct answer) are packed into variables so that they may be presented later to the student in random order. In this case, you are adding the correct answer alternative after the final comma.

Also used as feedback to give the student the correct answer.

#### **EXAMPLE**

pack temp,catext, (correct answer)

pack	temp,dist1,	\$\$ add text for distractor 1
pack	temp,dist2,	\$\$ add text for distractor 2
pack	temp,dist3,	\$\$ add text for distractor 3
pack	temp,dist4,	\$\$ add text for distractor 4
pack	temp,dist5,	\$\$ add text for distractor 5

You are permitted 1-5 distractors (wrong answer alternatives) in your question. Add them after the final comma in your code. They are limited to 40 characters (shifted characters count as 2). Don't be concerned with their order inasmuch as they will be presented to the student in random order.

If you do not require all 5 distractors in your question leave any unneeded ones blank after the final comma. (Or you may delete them.)

# EXAMPLE

pack pack		answer alternative a answer alternative b
pack	temp,distz,wiong	allower afternative b
pack	temp,dist3,wrong	answer alternative c
pack	temp,dist4,	(not needed)
pack	temp,dist5,	(not needed)

pack	temp,match1,	\$\$ add match answer item 1
pack	temp,match2,	\$\$ add match answer item 2
pack	temp,match3,	\$\$ add match answer item 3
pack	temp,match4,	\$\$ add match answer item 4
pack	temp,match5,	\$\$ add match answer item 5
pack	temp,match6,	\$\$ add match answer item 6
pack	temp,match7,	\$\$ add match answer item 7
pack	temp,match8,	\$\$ add match answer item 8
pack	temp,match9,	\$\$ add match answer item 9

You may have as many as 9 matching items (answer alternatives). Add the text for these items after the final comma. Each item is limited to 40 characters (shifted characters count as 2). Don't be concerned about order since they are presented in random order.

If you have fewer than 9 matching items leave blank after final comma (or delete).

# EXAMPLE

pack	temp,match1,answer 1	
pack	temp,match2,answer 2	
pack	temp,match3,answer 3	
pack	temp,match4,answer 4	
pack	temp,match5,answer 5	
pack	temp,match6,	(not used)
pack	temp,match7,	(not used)
pack	temp,match8,	(not used)
pack	temp,match9,	(not used)

pack	temp,waf,	\$\$ add fdback-"general" wrong answer
	0	R
pack	temp,waf,	\$\$ add general feedback 1
pack	temp,waf2,	\$\$ add general feedback 2
pack	temp,waf3,	\$\$ add general feedback 3
pack	temp,waf4,	\$\$ add general feedback 4

MONIFORM6—In this MONIFORM you may give only 1 general feedback for unanticipated wrong answers. This feedback is limited to 40 characters (shifted characters count as 2).

MONIFORM7—In this MONIFORM you may give a maximum of 4 general feedbacks for unanticipated wrong answers. The student will receive feedback 1 the first time he gives an unanticipated wrong answer, feedback 2 for the second unanticipated wrong answer, etc. Again, feedbacks are limited to 40 characters where shifted characters count as 2. Leave blank (or delete) any lines not needed.

#### EXAMPLE

pack	temp,waf,1st unanticipated answer feedback	
pack	temp,waf2,2nd unanticipated answer feedback	
pack	temp,waf3,3rd unanticipated answer feedback	
pack	temp,waf4, (not needed)	

# pack temp2,caf1, \$\$ add correct answer feedback

You may give the student a congratulatory message (feedback) if he gets the question entirely correct.

This message is limited to 40 characters (shifted characters count as 2). It is written immediately after the final comma. (Don't forget the comma.)

#### **EXAMPLE**

pack temp,caf1,Great! You got it correct.

# pack temp2,n(offset+1), \$\$ add correct answ string

You have written a maximum of 10 matching items (questions) and have presumably scrambled the answers. This line of coding tells PLATO what the order of the correct answers is (i.e., matching item 1 is answer c; item 2 is answer a; etc.). See the examples below for the method of signifying the correct answer string.

#### **EXAMPLES**

#### Make the matches below:

1.	Water	a.	Metal
2.	Iron	b.	Fluid
3.	Table salt	c.	Vegetable
4.	Pumpkin	d.	Mineral

# Correct method of completing code

pack temp2,n(offset + 1),badc

# Incorrect methods of completing code

pack	temp2,n(offset+1),b,a,d,c	(should not have commas between letters)
pack	temp2,n(offset+1),b a d c	(should not have spaces between letters)

\$\$ add line # for feedbacks to begin pos ¢ \$\$ (no greater than 28) In this MONIFORM, "pos" is used to designate the line on the screen (e.g., line 26) where you want any feedbacks that the student receives written. Do not specify a line greater than 28 inasmuch as lines below 28 are reserved for instructions. EXAMPLE pos ¢ 26 (All feedbacks in this example would be presented on line 26 of the screen.)

calc posB

\$\$ add screen position for first

\$\$ match answer

In this MONIFORM two columns are required which we arbitrarily designate as Column A and Column B below. (You need not label them.) Column A is a list of the match questions, and Column B is a list of answer alternatives.

In this line of code you are specifying the screen position where you want the Column B items (match answers) to begin. Make certain there is enough room for them to fit on the screen.

# **EXAMPLE**

calc

# This is screen position 2241 Column A Match question 1 Match question 2 Match answer 3 Match answer 1 Match answer 2

(in this example)

posB & 2241

\$\$ add # lines between match items space ⟨= You have the option of having single, double, or triple spacing between match items. So that PLATO will know how many lines to move the arrow after each time, you must indicate the number of lines between the items. **EXAMPLES** (1) Match item 1 Match item 2 space ¢ 1 Match item 3 Match item 4 (2) Match item 1 Match item 2 space ¢2 Match item 3

Match item 4

\$\$ r first \$\$ with desired specs

"r" means replace.

You have the option of having any "specs" that you wish used for judging the student's answer. You replace the first set of \$\$ with the "specs" you want (separated by commas).

NOTE: These MONIFORMS use the -concept- command for execution. Not all "specs" work with the -concept- command. Only the "specs" listed will work:

best bumpshift nomark nookno noorder okcap okspell

okxvocab

See Lesson AIDS for explanation.

# **EXAMPLE**

specs nomark,nookno,noorder,okspell,

vocabs	form5	\$\$ r form5 with your unit name
vocabs	form6	\$\$ r form6 with your unit name
vocabs	form7	\$\$ r form7 with your unit name

"r" means replace.

In all of the above coding lines you must replace form (5,6, or 7) with the unit name you assigned this constructed response question.

# **EXAMPLE**

 <zz,zz,zz>

\$\$ r zz's with optional words

"r" means replace.

You may designate optional words that will be disregarded in judging the student's answer.

Replace the "zz,zz,zz" with these optional words.

NOTE: When the -vocabs- command is used for judging the student's answer, optional words will not be disregarded if they come in the middle of words in an answer phrase (e.g., Alexandria is the city in Virginia). If "is,the,city,in" were designated as optional words, PLATO would not disregard them if the correct answer was "Alexandria Virginia). Therefore, optional words to be disregarded must come before or after the correct answer.

#### **EXAMPLE:**

< it, is, the, city >

# **DEBUGGING YOUR QUESTION**

You can always receive assistance in debugging your question by contacting Russel E. Schulz in the talk option or by leaving a personal note. Use the following:

Code name: re schulz Course: hum

You may also find the comments on the following pages helpful in debugging your question.

You may find it helpful to look at an example of a question prepared with the MONIFORM you have selected. If so, turn to page B-1.

You may also find it helpful to examine an accurately completed MONIFORM for the sample question. If so, turn to page C-1.

Or, turn to the next page for a troubleshooting list that may solve your problem.

- Are you completely familiar with the characteristics of the MONIFORM you are using? You may be expecting something from it that it was not designed to give.
- Check to make certain that Unit "setup" has been copied into your lesson only once and that the following are correct:
  - a. PLATO is executing Unit "setup" before it reaches your question.
  - All of the necessary -use- commands needed for your question to execute have been included in "setup".
  - c. If you have changed the value of "offset", check to be certain that you have not exceeded the permissible range of student variables (i.e., if your MONIFORM requires 75 variables, "offset" must be no greater than "76"). Otherwise you would be trying to use variables greater than 150.

- 3. If feedbacks or answer alternatives are not appearing as they should, check the following:
  - a. If a feedback doesn't appear at all:
    - (1) Check to be certain that you have not omitted the final comma in the -pack- statements (i.e., the one just before your feedback).
    - (2) If feedbacks are "general" you will not receive them unless you have specified enough attempts at the question for them to be used (e.g., if you permit only 2 tries at the question, only one (the first) general feedback will ever be used).
  - b. If feedback is "chopped" off in the middle you have probably exceeded the 40 character limit. (Shifted characters count as 2.)
  - c. If feedbacks are appearing at "funny" places on the screen you have probably set the value of the initial screen position (where your question starts) too low on the screen, or too far to the right.

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